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**REMARKS**

Claim 4 has been canceled. Claims 2 and 3 have been previously canceled. Claims 1, 12, and 20 have been amended. Claims 1 and 5 through 20 remain in the application.

The drawings were objected to under 37 C.F.R. 1.83(a) because the drawings must show every feature of the invention specified in the claims. Applicants respectfully traverse this objection.

The Examiner contends that the fuel permeation barrier layer attached to the cover to cover a surface area solely inside of the skirt is not shown. The Specification clearly states, on page 7, lines 1 through 3, that the fuel permeation barrier layer 48 is used to cover the surface area inside of the skirt 36 of the cover 22. Applicants direct the Examiner's attention to Figure 3, which clearly shows the fuel permeation barrier layer 48 is used to cover the surface area inside of the skirt 36 of the cover 22. In Figure 3, the fuel permeation barrier layer 48 is used to cover the surface area solely inside of the skirt 36 of the cover 22 although the word "solely" is not literally recited in the Specification. However, claims 1, 12, and 20 have been amended to delete the word "solely". It is respectfully submitted that the drawings overcome the objection and are acceptable.

Claims 1 and 4 through 20 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection.

The first paragraph of Section 112 provides that "the specification shall contain a written description of the invention . . .". "The description requirement's purposes are to assure that the applicant was in full possession of the claimed subject matter on the application filing date and to allow other inventors to develop and obtain patent protection for later improvements

and subservient inventions that build on applicant's teachings." See In re Barker, 559 F.2d 588, 194 U.S.P.Q. 470 (C.C.P.A. 1977), cert. denied, 434 U.S. 1064 (1978); Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 19 U.S.P.Q.2d 1111 (Fed. Cir. 1991); and In re Dossel, 115 F.2d 942, 42 U.S.P.Q.2d 1881 (Fed. Cir. 1997).

The subject matter of the later claim need not be described literally or "in haec verba" in order for the specification to satisfy the description requirement. See Fujikawa v. Wattanasin, 93 F.3d 1559, 1570, 39 U.S.P.Q.2d 1895, 1904 (Fed. Cir. 1996) ("*ipsis verbis* disclosure is not necessary to satisfy the written description requirement of section 112. Instead, the disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question."); In re Alton, 76 F.3d 1168, 1175, 37 U.S.P.Q.2d 1578, 1584 (Fed. Cir. 1996) ("If a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate written description requirement is met.")

Thus, the dispositive issue is whether Applicants' disclosure in the patent application relied upon "reasonably conveys to the artisan that the inventor had possession at the time of the later claimed subject matter". The threshold step in resolving this issue as set forth *supra* is to determine whether the Examiner has met his/her burden of proof by advancing acceptable reasoning inconsistent with the written description. This the Examiner has not done.

The Specification clearly states, on page 7, lines 1 through 3, that the fuel permeation barrier layer 48 is used to cover the surface area inside of the skirt 36 of the cover 22. FIG. 3 clearly shows that the fuel permeation barrier layer is attached to the cover to cover a surface area inside of the skirt.

Based on the above, Applicants' disclosure reasonably conveys to the artisan that the inventor had possession at the time of the later claimed subject matter. Contrary to the Examiner's assertion, Applicants' have expressly disclosed that the fuel permeation barrier layer is used to cover the surface area inside of the skirt of the cover. Applicants' have also inherently disclosed that the fuel permeation barrier layer is used to cover the surface area solely inside of the skirt of the cover although the word "solely" is not literally recited in the Specification because it is clearly shown in the drawings, which form part of the disclosure. Finally, an artisan would reasonably understand from the Specification and drawings as a whole, that the fuel permeation barrier layer is used to cover the surface area solely inside of the skirt of the cover. This feature is not new matter. However, claims 1, 12, and 20 have been amended to delete the word "solely". Therefore, it is respectfully submitted that claims 1 and 5 through 20 are allowable over the rejection under 35 U.S.C. § 112, first paragraph.

Claims 1, 4 through 11, and 20 were rejected under 35 U.S.C. § 103 as being unpatentable over Kloess et al. (U.S. Patent No. 6,357,618) in view of Reamy (U.S. Patent No. 1,979,706) in view of Abu-Isa (U.S. Patent No. 6,395,357). Claims 1, 4 through 11, and 20 were also rejected under 35 U.S.C. § 103 as being unpatentable over Kloess et al. '618 in view of Reamy '706 and Duhaime et al. (U.S. Patent No. 5,425,470). Applicants respectfully traverse both of these rejections.

U.S. Patent No. 6,357,618 to Kloess et al. discloses a fuel tank assembly for a motor vehicle. A cover element 20 generally covers an opening 12. The cover element 20 has a cylindrical portion 24 and a flange 26 which is integral with the cylindrical portion 24 and which extends substantially radially outward and beyond the cylindrical portion 24. Kloess et al. does not disclose the cover element having a raised portion extending axially from a base wall and a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a

skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt.

U.S. Patent No. 1,979,706 to Reamy discloses a can cover. A can 2 has an opening 4. A cover fitting over the opening 4 has a flange 5, a flange 6, and a diaphragm 7 between the two flanges 5 and 6. Reamy does not disclose a fuel module cover having a base wall, a raised portion extending axially from the base wall and radially across the base wall, and a skirt extending axially from the base wall opposite the raised portion. Reamy also does not disclose a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of the skirt to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt.

U.S. Patent No. 6,395,357 to Abu-Isa discloses a fuel permeation barrier fuel tank. The fuel permeation barrier fuel tank 10 has base walls 18,24, side walls 20,26, and flanges 22,28 formed from a plurality of layers 30,32,34,36,38,40. The third layer 34 is a barrier layer made from an ethylene vinyl alcohol (EVOH) copolymer. The third layer 34 has a predetermined thickness of approximately 0.11 mm. The third layer 36 also has a predetermined percentage of the material weight such as approximately 3.0%. Abu-Isa does not disclose a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt.

U.S. Patent No. 5,425,470 to Duhaime et al. discloses a fuel tank closure. A closure plug 42 is within an opening 40. The closure plug 42 includes an inner layer 44, outer layer 46, and barrier layer 48 therebetween. The barrier layer 48 is made from a similar material as barrier layer 24. Suitable material for barrier layer 24 includes ethylene vinyl alcohol (EVOH), nylon, and acetel. Duhaime et al. does not disclose a fuel permeation barrier layer attached to a

fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt.

In contradistinction, claim 1, as amended, clarifies the invention claimed as a permeation barrier fuel module cover assembly for a fuel tank of a vehicle including a cover for a fuel module having a base wall, a raised portion extending axially from the base wall, and a skirt extending axially from the base wall opposite the raised portion. The permeation barrier fuel module cover assembly also includes a fuel permeation barrier layer attached to the cover to cover a surface area inside of the skirt to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt.

The United States Court of Appeals for the Federal Circuit (CAFC) has stated in determining the propriety of a rejection under 35 U.S.C. § 103, it is well settled that the obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). The law followed by our court of review and the Board of Patent Appeals and Interferences is that “[a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.” In re Rinehart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (C.C.P.A. 1976). See also In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. 1257, 1258 (Fed. Cir. 1984) (“In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be

sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.”)

None of the references cited, either alone or in combination with each other, teach or suggest the claimed invention of claim 1. Specifically, Kloess et al. ‘618 merely discloses a fuel tank assembly for a motor vehicle having a cover element generally covering an opening and including a cylindrical portion and a flange which is integral with the cylindrical portion and which extends substantially radially outward and beyond the cylindrical portion. Kloess et al. ‘618 lacks the cover element having a raised portion extending axially from a base wall and a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt. In Kloess et al. ‘618, there is no raised portion on the cover element or a fuel permeation barrier layer on the cover element.

Reamy ‘706 merely discloses a can cover fitting over an opening of a can and having a first flange, a second flange, and a diaphragm between the two flanges. Reamy ‘706 lacks a fuel module cover having a base wall, a raised portion extending axially from the base wall and radially across the base wall, and a skirt extending axially from the base wall opposite the raised portion. Reamy ‘706 also lacks a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt. In Reamy ‘706, the can cover is not used for a fuel tank and there is no fuel permeation barrier layer attached to the can cover.

Abu-Isa ‘357 merely discloses a fuel permeation barrier fuel tank having base walls, side walls, and flanges formed from a plurality of layers in which a third layer is a barrier

layer made from an ethylene vinyl alcohol (EVOH) copolymer. Abu-Isa '357 lacks a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt. In Abu-Isa '357, the barrier layer is not used for a fuel module cover and there is no teaching that it could be disposed between a base wall and a raised portion within a skirt of a fuel module cover. There is no motivation in the art to combine Kloess et al. '618, Reamy '706, and Abu-Isa '357 together.

Duhaime et al '470 merely discloses a fuel tank closure having an inner layer, outer layer, and barrier layer therebetween. Duhaime et al. '470 lacks a fuel permeation barrier layer attached to a fuel module cover to cover a surface area inside of a skirt of the cover to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt. In Duhaime et al. '470, the barrier layer 48 is not disposed within the skirt for the closure plug 42. There is no motivation in the art to combine Kloess et al. '618, Reamy '706, and Duhaime et al. '470 together.

The present invention sets forth a unique and non-obvious combination of a permeation barrier fuel module cover assembly that uses a barrier layer, which provides for performance enhancement in permeation of polymer covers used on fuel modules by reducing the surface area through which hydrocarbons can escape. The references, if combinable, fail to teach or suggest the combination of a permeation barrier fuel module cover assembly including a fuel permeation barrier layer attached to a fuel module cover having a base wall, a raised portion extending axially from the base wall, and a skirt extending axially from the base wall opposite the raised portion to cover a surface area inside of the skirt to retard permeation of fuel through the cover with the fuel permeation barrier layer being disposed between the base wall and the raised portion within the skirt as claimed by Applicants. The Examiner has failed to establish a case of



prima facie obviousness. Therefore, it is respectfully submitted that claim 1 and the claims dependent therefrom are allowable over all of the rejections under 35 U.S.C. § 103.

As to claim 20, claim 20, as amended, clarifies the invention claimed as a permeation barrier fuel module cover assembly for a fuel tank of a vehicle including a fuel module cover having a base wall, a raised portion extending axially from the base wall and radially across the base wall, and a skirt extending axially from the base wall opposite the raised portion. The permeation barrier fuel module cover assembly also includes a fuel permeation barrier layer molded into the fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover.

None of the references cited, either alone or in combination with each other, teach or suggest the claimed invention of claim 20. Specifically, Kloess et al. '618 merely discloses a fuel tank assembly for a motor vehicle having a cover element generally covering an opening and including a cylindrical portion and a flange which is integral with the cylindrical portion and which extends substantially radially outward and beyond the cylindrical portion. Kloess et al. '618 lacks the cover element having a raised portion extending axially from a base wall and radially across the base wall and a fuel permeation barrier layer molded into a fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover. In Kloess et al. '618, there is no raised portion on the cover element or a fuel permeation barrier layer on the cover element.

Reamy '706 merely discloses a can cover fitting over an opening of a can and having a first flange, a second flange, and a diaphragm between the two flanges. Reamy '706 lacks a fuel module cover having a base wall, a raised portion extending axially from the base

wall and radially across the base wall, and a skirt extending axially from the base wall opposite the raised portion. Reamy '706 also lacks a fuel permeation barrier layer molded into a fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover. In Reamy '706, the can cover is not used for a fuel tank and there is no fuel permeation barrier layer attached to the can cover.

Abu-Isa '357 merely discloses a fuel permeation barrier fuel tank having base walls, side walls, and flanges formed from a plurality of layers in which a third layer is a barrier layer made from an ethylene vinyl alcohol (EVOH) copolymer. Abu-Isa '357 lacks a fuel permeation barrier layer molded into a fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover. In Abu-Isa '357, the barrier layer is not used for a fuel module cover and there is no teaching that it could be disposed between a base wall and a raised portion within a skirt of a fuel module cover. There is no motivation in the art to combine Kloess et al. '618, Reamy '706, and Abu-Isa '357 together.

Duhaime et al. '470 merely discloses a fuel tank closure having an inner layer, outer layer, and barrier layer therebetween. Duhaime et al. '470 lacks a fuel permeation barrier layer molded into a fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover. In Duhaime et al. '470, the barrier layer 48 is not molded into the closure plug 42 and disposed within the skirt for the closure plug 42. There is no motivation in the art to combine Kloess et al. '618, Reamy '706, and Duhaime et al. '470 together.

The present invention sets forth a unique and non-obvious combination of a permeation barrier fuel module cover assembly that uses a barrier layer, which provides for

performance enhancement in permeation of polymer covers used on fuel modules by reducing the surface area through which hydrocarbons can escape. The references, if combinable, fail to teach or suggest the combination of a permeation barrier fuel module cover assembly including a fuel permeation barrier layer molded into a fuel module cover and disposed between the base wall and the raised portion within the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the fuel module cover as claimed by Applicants.

Further, the CAFC has held that “[t]he mere fact that prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification”. In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). The Examiner has failed to show how the prior art suggested the desirability of modification to achieve Applicants’ invention. The Examiner has failed to establish a case of prima facie obviousness. Therefore, it is respectfully submitted that claim 20 is allowable over the rejections under 35 U.S.C. § 103.

Claims 12 through 19 were rejected under 35 U.S.C. § 103 as being unpatentable over Kloess et al. ‘618 in view of Abu-Isa ‘357. Claims 12 through 19 were rejected under 35 U.S.C. § 103 as being unpatentable over Kloess et al. ‘618 in view of Duhaime et al. ‘470. Applicants respectfully traverse both rejections.

As to claim 12, claim 12, as amended, clarifies the invention claimed as a permeation barrier fuel module cover assembly for a fuel tank of a vehicle including a cover for a fuel module having a base wall and a skirt extending axially from the base wall. The permeation barrier fuel module also includes a fuel permeation barrier layer attached to the cover inside of the skirt to cover a surface area inside of the skirt to retard permeation of fuel through the cover with the fuel permeation barrier layer being molded into the cover and disposed within the skirt.

None of the references cited, either alone or in combination with each other, teach or suggest the claimed invention of claim 12. Specifically, Kloess et al. '618 merely discloses a fuel tank assembly for a motor vehicle having a cover element generally covering an opening and including a cylindrical portion and a flange which is integral with the cylindrical portion and which extends substantially radially outward and beyond the cylindrical portion. Kloess et al. '618 lacks a fuel permeation barrier layer being molded into the cover and disposed within the skirt. In Kloess et al. '618, there is no fuel permeation barrier layer on the cover element.

Abu-Isa '357 merely discloses a fuel permeation barrier fuel tank having base walls, side walls, and flanges formed from a plurality of layers in which a third layer is a barrier layer made from an ethylene vinyl alcohol (EVOH) copolymer. Abu-Isa '357 lacks a fuel permeation barrier layer being molded into a cover. In Abu-Isa '357, the barrier layer is not used for a fuel module cover and there is no teaching that it could be disposed within a skirt of a fuel module cover. There is no motivation in the art to combine Kloess et al. '618 and Abu-Isa '357 together.

Duhaime et al '470 merely discloses a fuel tank closure having an inner layer, outer layer, and barrier layer therebetween. Duhaime et al. '470 lacks a fuel permeation barrier layer being molded into the cover and disposed within the skirt. In Duhaime et al. '470, the barrier layer 48 is not molded into the closure plug 42 and disposed within the skirt for the closure plug 42. There is no motivation in the art to combine Kloess et al. '618 and Duhaime et al. '470 together.

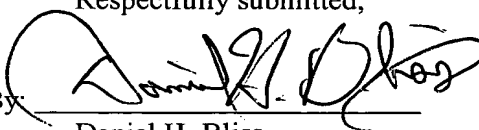
The references, if combinable, fail to teach or suggest the combination of a permeation barrier fuel module cover assembly including a fuel permeation barrier layer attached to a fuel module cover having a base wall, a raised portion extending axially from the base wall, and a skirt extending axially from the base wall opposite the raised portion to cover a surface area

inside of the skirt to retard permeation of fuel through the cover with the fuel permeation barrier layer being molded into the cover and disposed within the skirt as claimed by Applicants. The claimed invention is novel and unobvious because the permeation barrier fuel module cover assembly uses a barrier layer, which provides for performance enhancement in permeation of polymer covers used on fuel modules by reducing the surface area through which hydrocarbons can escape. The Examiner has failed to establish a case of prima facie obviousness. Therefore, it is respectfully submitted that claim 12 and the claims dependent therefrom are allowable over all of the rejections under 35 U.S.C. § 103.

Obviousness under § 103 is a legal conclusion based on factual evidence (In re Fine, 837 F.2d 1071, 1073, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988), and the subjective opinion of the Examiner as to what is or is not obvious, without evidence in support thereof, does not suffice. Since the Examiner has not provided a sufficient factual basis, which is supportive of his/her position (see In re Warner, 379 F.2d 1011, 1017, 154 U.S.P.Q. 173, 178 (C.C.P.A. 1967), cert. denied, 389 U.S. 1057 (1968)), the rejections of claims 1 and 4 through 20 are improper. Therefore, it is respectfully submitted that claims 1 and 4 through 20 are allowable over the rejections under 35 U.S.C. § 103.

Based on the above, it is respectfully submitted that the claims are in a condition for allowance or in better form for appeal. Applicants respectfully request reconsideration of the claims and withdrawal of the final rejection. It is respectfully requested that this Amendment be entered under 37 C.F.R. 1.116.

Respectfully submitted,

By 

Daniel H. Bliss

Reg. No. 32,398

Delphi Technologies, Inc.  
Legal Staff – Intellectual Property  
M/C 480-410-202  
P.O. Box 5052  
Troy, Michigan 48007  
(248) 813-1240

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